

a.  $\int \frac{18}{x^2 - x - 20} dx$

b.  $\int \frac{9x - 8}{(x - 3)(2x - 5)} dx$

c.  $\int \frac{2x - 1}{(x + 1)^3} dx$

d.  $\int \frac{x^2 - x + 4}{(x + 4)^3} dx$

e.  $\int \frac{8x - 4}{x^3(2x - 4)} dx$

f.  $\int \frac{5x^2 + 20x + 6}{x^3 + 2x^2 + x} dx$

1.  $\int \frac{x - 1}{x^2 + x} dx$

2.  $\int \frac{1}{x(2x + 3)} dx$

3.  $\int \frac{5x - 2}{(x - 2)^2} dx$

4.  $\int \frac{3x + 6}{x^2 + 18x + 81} dx$

5.  $\int \frac{2x^2 - 3}{x^3 + 6x^2} dx$

6.  $\int \frac{x - 4}{2x^3 + 16x^2 + 32x} dx$

7.  $\int \frac{x + 2}{2x^2 - x} dx$

8.  $\int \frac{3x + 10}{x^2 + 2x} dx$

9.  $\int \frac{1}{(x + 1)(x + 2)(x + 3)} dx$

10.  $\int \frac{x + 1}{x^2 - 16} dx$

11.  $\int \frac{x - 1}{x^2(x + 1)} dx$

12.  $\int \frac{x + 4}{x^2(x + 1)^2} dx$

## Respuestas

- a.  $2 \ln|x - 5| - 2 \ln|x + 4| + C$
- b.  $19 \ln|x - 3| - \frac{29}{2} \ln|2x - 5| + C$
- c.  $-\frac{2}{(x + 1)} + \frac{3}{2(x + 1)^2} + C$
- d.  $\ln|x + 4| + \frac{9}{x + 4} - \frac{12}{(x + 4)^2} + C$
- e.  $\frac{3}{4} \ln \left| \frac{2x - 4}{x} \right| + \frac{3}{2x} - \frac{1}{2x^2} + C$
- f.  $6 \ln|x| - \ln|x + 1| - \frac{9}{x + 1} + C$
1.  $-\ln|x| + 2 \ln|x + 1| + C$
2.  $\frac{1}{3} \ln|x| - \frac{1}{3} \ln|2x + 3| + C$
3.  $5 \ln|x - 2| - \frac{8}{x - 2} + C$
4.  $3 \ln|x + 9| + \frac{21}{x + 9} + C$
5.  $\frac{1}{12} \ln|x| + \frac{1}{2x} + \frac{23}{12} \ln|x + 6| + C$
6.  $-\frac{1}{8} \ln|x| + \frac{1}{8} \ln|x + 4| - \frac{1}{x + 4} + C$
7.  $-2 \ln|x| + \frac{5}{2} \ln|2x - 1| + C$
8.  $5 \ln|x| - 2 \ln|x + 2| + C$
9.  $\frac{1}{2} \ln|x + 1| - \ln|x + 2| + \frac{1}{2} \ln|x + 3| + C$
10.  $\frac{5}{8} \ln|x - 4| + \frac{3}{8} \ln|x + 4| + C$
11.  $2 \ln|x| + \frac{1}{x} - 2 \ln|x + 1| + C$
12.  $-7 \ln|x| - \frac{x}{4} + 7 \ln|x + 1| - \frac{3}{x + 1} + C$